

**Tribhuvan University**  
**Institute of Science and Technology**

**2070**

Bachelor Level/ Fourth Year/ Seven Semester/ Science  
Computer Science and Information Technology (CSc. 402)  
(Internet Technology)

Full Marks: 60  
Pass Marks: 24  
Time: 3 hours

*Candidates are required to give their answers in their own words as far as practicable.  
The figures in the margin indicate full marks.*

**Attempt all questions.**

1. How does satellite link work? What are the advantages using satellite as communications?
2. What do you mean by internet protocol suite? Discuss about the IP heads.
3. What are the main services provided by PGP protocol? How those consume in mail application?
4. What is VPN tunnel? Illustrate the principle of VPN client-server interaction with an example.
5. Describe the XML usage in web. What an XML element can contain, show with an example.
6. What do you mean by universal naming conventions? Given a URL string "http:mail.google.com/?shva=index#inbox". Now identify schema name hierarchical part, query & fragment in the string.
7. How an AJAX program gets executed? Discuss the steps of AJAX operations. Show with e.g. How can we create XML http report object?
8. What are the proxy servers? Differentiate each of open, forward and reverse proxy servers.
9. Define working mechanism of VOIP? How undefined message benefits the communication systems?
10. Why load balancing is needed in servers? How WRR allocation for load balancing differs from dynamic round robin allocation?

**IOST, TU**